

REMARKS

Reconsideration of this application and the rejection of claims 1-29 are respectfully requested. Applicant has attempted to address every objection and ground for rejection in the Office Action dated December 15, 2006 (Paper No. 20061019) and believes the application is now in condition for allowance. The claims have been amended to more clearly describe the present invention. The Specification has been amended to correct typographical and grammatical errors. No new matter has been added to the Specification.

Applicant herewith concurrently submits a Notice of Loss of Entitlement to Small Entity Status under 37 C.F.R. §1.27(g)(2), along with a check to cover the filing fee deficiency, and respectfully requests Applicant's Entity Status to be amended to "Large Entity."

The Specification has been amended to include the proper headings under 37 C.F.R. §1.77(b), and Applicant respectfully submits that as amended, the Specification is in proper form. In addition, the claims have been objected to because of insufficient antecedent basis issues. Accordingly, Applicant has amended claims 1-4, 6, 7, 10-12, 14-16, 18-26 and 28 to include proper antecedent basis.

The claims stand rejected under 35 U.S.C. §112, second paragraph, because the terms "preferably" in claims 2 and 20; "a geometrical connecting axis" in claim 20; "and the like" in claims 6, 15 and 18; and the "travel measurement means" in claim 21 are indefinite. Accordingly, Applicant has

amended claims 2, 6, 15, 18, 20 and 21 and respectfully submits that the claims definitively point out and distinctly claim the subject matter which Applicant regards as the invention. Regarding claims 20 and 21, Applicant has amended the claim language to clarify the points raised by the Examiner.

Claims 1-18, 20, 21, 22 and 25-29 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Wiles et al. (U.S. Pat. No. 6,509,964) in view of Eidelman (U.S. Pat. No. 6,822,734). Wiles discloses a multi-beam apparatus for measuring surface quality including a first light source 12a directing focused beams of light 14 onto a surface of a workpiece 10 and a second light source 26 configured to provide a beam of collimated, unfocused light. (Col. 6, ll. 9-16 and 38-41; FIG. 3). The beams 14 are reflected from a first mirror 16 onto the workpiece 10, and then again reflected by a second mirror 18 so as to converge at a single point on a photo detector 20. (Col. 6, ll. 15-21; FIG. 3). Eidelman discloses an apparatus and method for inspecting fabricated flat workpieces such as flat panel display substrates. The inspection apparatus 14 includes an inspection closure 40 having an array of illumination units 60 each including a diffuser 68. (Col. 21, ll. 6-21; FIG. 6).

In contrast, amended claim 1 now incorporates features of cancelled claims 5 and 8 and recites, among other things, "...said at least one second radiation means comprises at least one radiation diffuser means, mounted at a specified diffuser surface angle relative to a geometrical connecting axis extending from said second radiation means to a geometrical center of the measurement

surface, wherein a spatial orientation and position of a diffuser surface of said at least one second radiation means is variable relative to the geometrical connecting axis.”

Applicant submits that neither Wiles nor Eidelman, either alone or in combination, discloses or suggests all of the features recited in amended claim 1. Specifically, the Examiner concedes that Wiles fails to disclose or suggest a diffuser means mounted at a specific angle, as recited in amended claim 1. In Eidelman, the illumination unit 60 includes a diffuser 68 for diffusing light as it exits the illumination unit. The illumination unit 60 illuminates a substrate 24, such that the light on the substrate is reflected from a mirror 50 onto a sensor or radiation detecting means 48. (FIG. 3).

In Eidelman, the angle of the illumination unit 60 depends on the angle of the stage 46, and the illumination can deflect from any point of the substrate 24 as long as it reflects from the mirror 50. Therefore, the angle of illumination in Eidelman is not relative to “a geometrical connecting axis from the radiation means to the geometrical center of the measurement surface,” as recited in amended claim 1.

Further, Applicant submits that there is no motivation or incentive to modify Wiles as suggested by the Examiner. Specifically, Eidelman detects surface defects or contamination of fabricated computer flat surface panel displays prior to further fabrication or packaging, which is non-analogous to Wiles, which measures visual surface characteristics of a typically painted or otherwise coated

workpiece. Accordingly, Applicant submits that it would not have been obvious to one having ordinary skill in the quality control of painting or coating art to modify Wiles in view of Eidelman as suggested by the Examiner, and respectfully traverses the rejection of claims 1-18, 20, 21, 22 and 25-29 under 35 U.S.C. §103(a).

Claims 19, 23 and 24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Wiles in view of Schwarz (U.S. Pat. No. 6,542,248). The arguments made above traversing Wiles are reasserted here. Schwarz discloses a device and method for determining the quality of structured surfaces, including a measurement device and a coating thickness sensor 5.

Applicant submits that none of Wiles, Eidelman or Schwarz, either alone or in combination, disclose or suggest all of the features recited in amended claim 1, from which claims 19, 23 and 24 depend. Specifically, as stated above, Eidelman fails to disclose or suggest that the angle of illumination is relative to “a geometrical connecting axis from the radiation means to the geometrical center of the measurement surface,” as recited in amended claim 1.

Further, Applicant submits that there is no incentive or motivation to combine the references because Eidelman relates to non-analogous art, and it would not have been obvious to one having ordinary skill in the art to modify Wiles as suggested. Accordingly, Applicant respectfully traverses the rejection of claims 19, 23 and 24 under 35 U.S.C. §103(a).

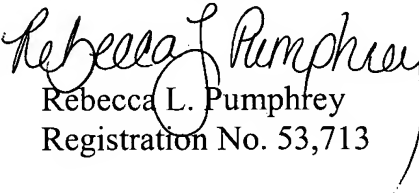
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In view of the above amendments, the application is respectfully submitted to be in allowable form. Allowance of the rejected claims is respectfully requested. Should the Examiner discover there are remaining issues which may be resolved by a telephone interview, he is invited to contact Applicant's undersigned attorney at the telephone number listed below.

Respectfully submitted,

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